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NOTICE OF ALLOWANCE AND FEE(S) DUE

82727 7590 03/19/2010

Jae Y. Park Kile, Goekjian, Reed & McManus, PLLC 1200 New Hampshire Ave. NW, Suite 570 EXAMINER

CECIL, TERRY K

ART UNIT PAPER NUMBER

1707

Washington, DC 20036 DATE MAILED: 03/19/2010

 APPLICATION NO.
 FILING DATE
 FIRST NAMED INVENTOR
 ATTORNIEY DOCKET NO.
 CONFIRMATION NO.

 10/542,216
 07/14/2005
 Anderson H Kim
 WEL-0039-SE
 1735

TITLE OF INVENTION: IN-WATER DISCHARGING CORE AND STERILIZING WATER SUPPLYING SYSTEM USING SAID CORE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	06/21/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT, PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

appropriate. All further indicated unless corrects maintenance fee notifica	correspondence includir ed below or directed oth	ng the Patent, advance on herwise in Block 1, by (a	rders and notification of n a) specifying a new corres	naintenance fees wi pondence address;	ill be i and/or	mailed to the current (b) indicating a sepa	correspondent	ondence address as EE ADDRESS" for
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Washington, DC	. 20056							(Depositor's name)
			<u> </u>					(Signature)
								(Date)
APPLICATION NO.	APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR		ATTORNEY DOCKET NO. CONFIRM		IRMATION NO.	
10/542,216 TITLE OF INVENTION	07/14/2005 I: IN-WATER DISCHA	RGING CORE AND STE	Anderson H Kim ERILIZING WATER SUPI	PLYING SYSTEM		VEL-0039-SE G SAID CORE		1735
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE PREV. PAID ISSUE FEE		TOTAL FEE(S) DUE		DATE DUE	
nonprovisional	YES	\$755	\$300	\$0 \$1055			06/21/2010	
EXAM	EXAMINER ART UNIT		CLASS-SUBCLASS					
CECIL, T	CECIL, TERRY K 1797							
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A	ondence address (or Cha 3/122) attached. ication (or "Fee Address 12 or more recent) attach ND RESIDENCE DATA less an assignee is ident h in 37 CFR 3.II. Comp	nge of Correspondence "Indication form ed. Use of a Customer A TO BE PRINTED ON 2	2. For printing on the p (I) the names of up to or agents OR, alternativ (2) the name of a single registered attorney or a 2 registered patent attoe listed, no name will be THE PATENT (print or typ data will appear on the p T a substitute for filing an (B) RESIDENCE: (CITY)	3 registered patent vely, e firm (having as a sigent) and the name meys or agents. If n printed.	members of uponam	er a 2	ocument	has been filed for
Please check the appropr	iate assignee category or	categories (will not be pr	inted on the patent):	Individual 🚨 Cor	porati	on or other private gro	oup entit	y Government
4a. The following fee(s) Issue Fee Publication Fee (N	vo small entity discount p		o. Payment of Fee(s): (Plea A check is enclosed. Payment by credit can the Director is hereby overpayment, to Depo	d. Form PTO-2038	is atta	ched.		
	s SMALL ENTITY state	is. See 37 CFR 1.27.	b. Applicant is no long					
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not be accepted tes Patent and Trademark	d from anyone other than to Office.	he applicant; a regis	tered a	ittorney or agent; or th	ne assign	ee or other party in
Authorized Signature				Date				
Typed or printed name			Registration No.					
This collection of inform an application. Confiden submitting the complete this form and/or suggests Box 1450, Alexandria, V Alexandria, Virginia 223	nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this but 'irginia 22313-1450. DC k13-1450.	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the ONOT SEND FEES OR (on is required to obtain or r 1.14. This collection is est depending upon the indiv e Chief Information Office COMPLETED FORMS TO	etain a benefit by th imated to take 12 m idual case. Any cor r, U.S. Patent and T O'THIS ADDRESS.	e publ inutes nment: l'radem SENI	ic which is to file (and to complete, includir s on the amount of tin ark Office, U.S. Dep O TO: Commissioner	d by the ng gather me you i artment for Pater	USPTO to process) ing, preparing, and require to complete of Commerce, P.O. its, P.O. Box 1450,

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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/542,216		07/14/2005	Anderson H Kim	WEL-0039-SE	1735	
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Jae Y. Park				CECIL, TERRY K		
Kile, Goekjian, Reed & McManus, PLLC				ART UNIT	PAPER NUMBER	
1200 New Hampshire Ave. NW, Suite 570 Washington, DC 20036			1797			
			DATE MAILED: 03/19/2010			

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 801 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 801 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)				
10/542,216	KIM, ANDERSON H				
Examiner	Art Unit				
Mr. Terry K. Cecil	1797				

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included
herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS
NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative
of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- 1. This communication is responsive to the POA filed 2-21-2010 and the t. interview of 3-1-2010.
- 2. The allowed claim(s) is/are 42-44 are allowed and have been renumbered upon allowance as claims 1-3..
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a)

 All b)

 Some* c)

 None of the:
 - 1. A Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____
 - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDOMMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) Thereto or 2) to Paper No./Mail Date
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying Indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2.
 Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08),
- Paper No./Mail Date
- Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date .
- 7. X Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. 🔲 Other _____.

Art Unit: 1797

Claims 42-44 are allowed and have been renumbered upon allowance as claims 1-3.

EXAMINER'S AMENDMENT

- An examiner's amendment to the record appears below. Should the changes and/or
 additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR
 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the
 payment of the issue fee. Authorization for this examiner's amendment was given in a telephone
 interview with Jae Park on 03/01/2010. During the Examiner's initiated interview (where no
 prior art was discussed) it was decided that the independent claim would be amended as
 hereinbelow to obviate rejections under 112, 2nd paragraph.
- The application has been amended as follows:
- Claims 1-6, 13, 15-19, and 22-26 have been canceled.
- Claim 42 has been amended as follows:
 - 42. (Currently amended) An underwater discharge core comprises:
 - a frame having a rectangular opening,
- a first platinum plated mesh with a plurality of horizontal strip bars and a plurality of horizontal strip liners made of plated conductive material for mounting on said frame to allow water flow, and
- a second platinum plated mesh with a plurality of vertical strip bars and a plurality of vertical strip liners made of plated conductive material for mounting opposite to said first platinum plated mesh on said frame and allowing water flow,

plurality of horizontal strip bars, and

wherein the plurality of horizontal strip bars are respectively cach coupled with both right and left edges of the first platinum plated mesh along an X-axis direction while being spaced apart from each other, and the plurality of horizontal strip liners are formed on disposed upon the

wherein the plurality of vertical strip bars are respectively each coupled with <u>both</u> top and bottom edges of the second platinum plated mesh along a Y-axis direction while being spaced apart from each other, and the plurality vertical strip liners are formed on <u>disposed upon</u> the plurality of the vertical strip bars.

· Abstract, last line, "System" has been replaced with "system".

Reasons for Allowance

- 3. The following is an examiner's statement of reasons for allowance:
- The closest cited art—'632 and Moriguchi—fail to anticipate or render obvious, alone or in any proper combination, the plurality of horizontal strip bars each being coupled with both right and left edges of the first platinum plated mesh along an X-axis direction while being spaced apart from each other, and the plurality of horizontal strip liners being disposed upon the plurality of horizontal strip bars (and similarly the vertical strip bars in the last 4 lines of the claim)—in combination with all the other limitations of claim 42.
- · The drawings filed 7-1-2009 have been approved.
- · The nonelected claims without traverse have been canceled.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Application/Control Number: 10/542,216

Art Unit: 1797

Such submissions should be clearly labeled "Comments on Statement of Reasons for

Allowance."

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Mr. Terry K. Cecil whose telephone number is (571) 272-1138.

The examiner can normally be reached on 8:00a-4:30p M-F...

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mr. Terry K. Cecil/ Primary Examiner, Art Unit 1797

tkc